## **ABSTRACT**

An autonomous personal transportation system for moving passengers and light freights is constructed with a track network and small vehicles on the track network. There are a number of stations and stops for loading and unloading on side tracks off the mainline of the track network. The vehicle width is limited to a dimension for one seat. The vehicles can be coupled statically or dynamically to form a train. The track has side rails for the rigid wheels of the vehicle and a central rail for centering the vehicle on the guideway and providing additional acceleration and braking capability. The control system for the movement of vehicles is divided into three levels: the central control system, the wayside control system and the vehicle control system.